STATE OF NEW MEXICO

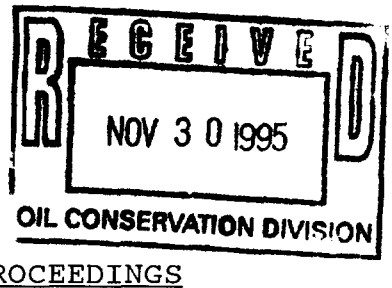
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF ENRON OIL AND GAS COMPANY FOR DOWNHOLE COMMINGLING AND A SPECIAL ALLOWABLE, EDDY COUNTY, NEW MEXICO

CASE NO. 11,424



REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 16th, 1995

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 16th, 1995, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

November 16th, 1995
Examiner Hearing
CASE NO. 11,424

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ALSO PRESENT:

DAVID BLEDSOE
Bass Enterprises

STANLEY J. PATCHET, PhD
Manager, Geotechnical Engineering
WIPP Project
Westinghouse Corporation

* * *

WHEREUPON, the following proceedings were had at 10:25 a.m.:

EXAMINER CATANACH: Call the hearing back to order, and at this time we'll call Case 11,424.

MR. CARROLL: Application of Enron Oil and Gas Company for downhole commingling and a special allowable, Eddy County, New Mexico.

EXAMINER CATANACH: Are there appearances in this case?

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr and Berge.

We represent Enron Oil and Gas Company in this matter, and I have three witnesses.

EXAMINER CATANACH: Any additional appearances?

MR. BLEDSOE: My name is David Bledsoe with Bass Enterprises, and I would like to make a statement at the end.

MR. PATCHET: I'm Stanley Patchet with Westinghouse Electric Corporation.

EXAMINER CATANACH: I'm sorry, I didn't catch your name?

MR. PATCHET: Stanley Patchet.

EXAMINER CATANACH: Thank you.

MR. COFFIELD: I'm Conrad Coffield with the

Hinkle Law Firm, appearing on behalf of Santa Fe Energy.

EXAMINER CATANACH: On behalf of Santa Fe Energy?

MR. COFFIELD: Yes.

EXAMINER CATANACH: Any additional appearances?

Will the three witnesses please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

PATRICK J. TOWER,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Will you state your name for the record, please?

A. It's Patrick J. Tower.

Q. And where do you reside?

A. Midland, Texas.

Q. By whom are you employed?

A. Enron Oil and Gas Company.

Q. And what is your current position with Enron?

A. I am a project landman.

Q. Mr. Tower, have you previously testified before this Division?

A. Yes, I have.

Q. At the time of that testimony were your credentials as a petroleum landman accepted and made a

matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Enron?

A. Yes, I am.

Q. And are you familiar with Enron's plans for downhole commingling in this proposed development area?

A. Yes, I am.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Mr. Tower, would you initially review for Mr. Catanach what Enron seeks to accomplish with this Application.

A. Enron is requesting to downhole commingle and a special allowable, seeks exception to Division General Rule 303 C, to establish an areawide basis for this downhole commingling of the Delaware, Bone Spring and Wolfcamp formations, of the current production in the wellbores, the existing wells, or future wells drilled anywhere in Section 36, Township 22 South, Range 30 East; the south half of Section 31, Township 22 South, Range 31 East; all of Section 1, Township 23 South, Range 30 East; all of Section 6, Township 23 South, Range 31 East, with the current production coming from portions of the Southeast Quahada

Ridge-Delaware pool, the Los Medanos-Bone Spring Pool and the South Los Medanos-Wolfcamp Pool.

We seek an establishment of special allowable of the wells commingled within this area, based on the top allowable of the shallowest commingled formation. For example, 320 barrels would be the rate of oil per day for the Bone Spring formation, or 187 barrels of oil per day where the Delaware is commingled.

Q. Have you prepared or has there been prepared under your direction certain exhibits for presentation here today?

A. Yes, they have.

Q. Let's refer to what has been marked for identification as Enron Oil and Gas Company Exhibit Number 1, and I would ask you to first identify this and then review it for Mr. Catanach.

A. Okay, Exhibit Number 1 is a land plat depicting the area involved. And as you'll note on this land plat, there's a coding symbol. In red, the red outline is what we have called the development area, which is the area of our Application for this commingling hearing.

The area in green, the green outlines identify the existing current pools identified in the request for the Application.

The area colored yellow depicts Enron's leasehold

position, where Enron owns a portion of the leasehold, undivided interest throughout the whole area.

As far as the balance of the plat -- Do you want me to go ahead and go into that?

Q. Yes.

A. Okay. Within -- As far as the ownership in here, within the development area, Enron and Bass own the majority of the working interest. Bass Enterprises Production Company is currently the unit -- this falls within the James Ranch Unit, which, additionally on the plat, you will note by a black stippled outline where a portion of this field is within this federal divided unit, with Bass being the unit operator.

However, back to the development area, Enron and Bass own the majority of working interest throughout the whole development area, with the exception of the southeast quarter of Section 36. Shell Oil Company owns a 50-percent interest as to the Bone Spring interval, inasfar as the zones that we're applying for.

Outside, you'll notice in large croyed letters, outside within a mile boundary of the area of development area, we have identified all of the offset operators surrounding the field.

Q. Mr. Tower, the unit boundary is the dark dashed line that goes across the map?

A. That is correct.

Q. That's operated by Bass?

A. Yes.

Q. And they're supporting the Application in this case?

A. Yes, they are.

Q. The current wells in the area are also shown on this exhibit; is that not correct?

A. Yes, they are.

Q. Let's go to what has been marked as Exhibit Number 2. Would you identify that, please?

A. Exhibit Number 2 is a listing of all the current producing wells within the development area. We have broken them down by section and further subdivided them by a half section, just for reference.

As you will note, we have also listed the additional deep wells, not to mention just the wells in the Delaware, Bone Spring and Wolfcamp intervals, for sake of reference.

This Application, we feel, would apply in the future -- As our geological witness will testify, these zones are encountered throughout the whole field, and there would be likelihood that some day these wells would also offer the opportunity for rework or recompletion to allow for the commingling.

Q. Is the ownership in the zones to be commingled common throughout the development area?

A. Yes, it is currently. The -- All ownership is common, as -- this being in a federal divided unit, participating areas are formed with the development of commercial wells, by formation.

Currently there's only one participating area within the formation that we're applying for, and that participating area is the Bone Spring, and it lies in Section 6, a 120-acre PA. The uniform is common throughout that whole participating area.

We do not anticipate any problems with subsequent PAs, as additional wells are added or commercial additional PAs applied for in handling this commingling. In fact, we have had discussions with the State Land Office, as well as directly with the BLM. As far as allocation among these PAs for this commingling, does not appear to be a problem.

Q. The BLM has expressed no objection?

A. This is correct.

Q. And what do they tell you today?

A. They're hard to reach. We've been trying to call them, though.

Q. Are all interest owners in all the formations that are being potentially commingled -- have all of those owners been notified of this Application?

A. Yes, they have. We have notified -- Within the development area, we have notified all of the working interest owners, all of the overriding royalty owners, all of the production payment owners and the royalty owners throughout the whole area underlying all of these wells.

Q. Is Exhibit Number 3 an affidavit with an attached list of the interest owners who have been notified and also copies of letters and return receipts confirming that notice of this Application has been provided in accordance with OCD rules?

A. Yes.

Q. Have these pools been commingled in other wells in this area?

A. Currently there's one well that has been approved and is currently being commingled. It is the James Ranch Unit Number 71 well.

It is located in the northeast quarter of the northeast quarter of Section 36 of 22-30. And it is, if you'll notice, the green outline identifying the South Los Medanos-Wolfcamp Pool.

That well is currently being commingled in the Bone Spring and Wolfcamp formations, however not including the Delaware at this point.

Q. Mr. Tower, was the Commissioner of Public Lands, the BLM and the Department of Energy -- were each of those

entities notified of today's hearing?

A. Yes, they were.

Q. Were Exhibits 1 through 3 prepared by you?

A. Yes, they were.

MR. CARR: At this time, Mr. Catanach, we would move the admission into evidence of Enron Exhibits 1 through 3.

EXAMINER CATANACH: Exhibits 1 through 3 will be admitted as evidence.

MR. CARR: And that concludes my direct examination of Mr. Tower.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Tower, this unit, the James Ranch Unit, is -- it's my understanding, is operated by Bass?

A. That's correct.

Q. Will they be operating these wells?

A. Some of the wells will be operated by Bass, some will be operated by Enron.

The arrangement under some old agreements are to the effect that prior to the establishment of these wells as commercial wells by BLM standards, and then thus the PA process, participating area process, Enron is allowed to drill and operate the wells. Once they become commercial, Bass takes over as operator, and it's selective as to

leases.

So in general, most of the wells, once they become commercial, we have -- Enron has turned those over to Bass Enterprises as unit operator.

But there is a mixture. We have some -- mostly, primarily, some deep wells outside the Application area that Enron still operates, and there are some pending wells that Enron has drilled that all the data is being collected and will likely be classified and put into a commercial termination and a participating area in the future. And at such point Bass will take those over.

Q. At the current time there's only a Bone Spring participating area within the unit?

A. That is correct, within this development area, yes.

Q. No Delaware or no Wolfcamp?

A. Not at this point.

Q. When a Wolfcamp or Delaware PA is established, will that change the interest ownership within a given well such that it won't be common?

A. It's possible, depending on the reservoir that the BLM decides goes into the PA. The ownership could become different, depending on the outline.

However, we believe -- and again, in the engineering testimony that's going to be presented in the

allocation method, that production can be established from which zone and allocated to the respective PA on a basis that will satisfy the requirements of the BLM under the unit agreement.

Q. You've contacted all working interest owners, all royalty interest owners, and all overrides?

A. That is correct, and production payment interests on some of those.

Q. And BLM and the State Land Office?

A. That is correct.

Q. Has anyone expressed any objections to this --

A. No, they have not. Mostly support verbally.

Q. How many wells do you anticipate being affected by this Application?

A. If I could, I might defer.

The geological witness is going to identify the producing wells currently in each horizon and get into the wells more specifically.

If it would be acceptable, I might defer that to him, to get into some of the details.

Q. Okay. Are you familiar with what Enron seeks in terms of the process, whereby -- Is this the form that Enron seeks final approval to actually do the commingling on the wells, or do you anticipate having to submit some type of additional paperwork or data?

A. In essence, it would be our opinion that this is the Application to give us the authority.

However, we're going to leave it to the discretion of the Commission. We were unclear as to, when we start doing some of these wells and testing them, as to what the Commission will require. Will it be a simple letter to the district office, advising them of the zones and the testing?

We were unclear as to the requirements of the Commission, other than we are requesting blanket authority to go forward with some simple mechanism such as a letter of our operations as we conduct them, to keep the OCD informed that we're complying with the commingling rules.

Q. Do you believe that commingling in this unit will protect the correlative rights of all the various working interest owners in the unit?

A. Yes, I do.

EXAMINER CATANACH: Okay. I have nothing further of the witness.

Are there any additional questions of the witness at this time?

The witness may be excused.

THE WITNESS: Thank you.

MR. CARR: At this time, Mr. Catanach, we would call Mr. Bruce Insalaco.

BRUCE INSALACO,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Would you state your name for the record, please?

A. Yes, my name is Bruce Insalaco.

Q. Where do you reside?

A. In Midland, Texas.

Q. By whom are you employed and in what capacity?

A. I'm employed by Enron Oil and Gas as a geologic specialist.

Q. Mr. Insalaco, have you previously testified before this Division?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as a petroleum geologist accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Enron?

A. Yes, I am.

Q. And have you made a geological study of the area which is involved in this case?

A. Yes, I did.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Have you prepared exhibits for presentation here today?

A. Yes, I have, seven exhibits.

Q. Mr. Insalaco, let's go to Enron's Exhibit Number 4, your structure map, and I would ask you to review that for Mr. Catanach.

A. Yes, first of all there's -- just to identify some of the outlines on here, the James Ranch unit boundary is outlined in blue. The development area is outlined in green, and the cross-section is identified A to A', running north-south through the area.

What this is is, again, a structure map on top of the Wolfcamp. You can see on this that there is a gently plunging anticline updip to the northwest and trending downdip to the south southeast. I've identified the wells that have penetrated the Wolfcamp with subsea datums. And also you can see coded on this exhibit the wells that are currently producing out of the upper Wolfcamp sand, which is the 71 well that Pat Tower had mentioned, and the four current Bone Spring -- third Bone Spring sand producers identified by green circles, which are the Number 30, the James Ranch Number 7, the James Ranch Number 17, and again

the James Ranch Number 71, the one well that is already commingled with the Wolfcamp.

Q. Basically what does this show you about the structure of the unit?

A. Structure is just gently trending approximately 100 foot per mile downdip, and that there really isn't a strong structural component to the trapping mechanism. You can see that production is up at subsea datum minus 7641 in the 71 well and at a structural position as low as 7766 in the James Ranch 30 well. So it appears that structure is not an important component to the trapping mechanism of the Wolfcamp and, as you will see, the upper Bone Spring -- or excuse me, the third Bone Spring.

Q. All right, Mr. Insalaco, on Exhibit 4 there's a trace for a cross-section, A-A'. Is that your Exhibit Number 5?

A. Yes, it is.

Q. Let's go to that and review it at this point.

A. Sorry about the size of it, but we tried to include all the different potential pays that we're asking for in terms of the commingling.

Starting at the base of the cross-section, the third marker up, there's a datum registered. That is the top of the Wolfcamp. It's a bold line, again, the third solid marker from the bottom. That is the datum used on

the structure map for Exhibit Number 4 that you have just seen.

Here the basal zone is this upper Wolfcamp sand, which is identified.

The next zone up is the third Bone Spring sand. The next -- which is another pay that was identified on the previous exhibit. And that takes us to approximately a position of 10,900 feet below the surface. And then we go from that datum up to the lower Brushy Canyon portion of the Delaware, and that is at a depth of approximately 7800, 7900 foot. And then going from there up further, you can see that we've identified three pays: the Delaware "D", the Delaware "C" and the Delaware "B", the Delaware "B" being the highest in this area at a depth of approximately 6800 feet.

Starting again back at the Wolfcamp, what I've tried to do, I've identified with the colors. You'll see isopach exhibits here. I used a 70-API-unit gamma-ray cutoff, which is colored in yellow, and I also used a density porosity cutoff of 10 percent. And where you have clean gamma ray and porosity greater than 10 percent, I am saying that that should be considered as pay for these tight, very fine-grain, low-permeability sands.

Now, starting again at the base, you can see that the Number 71 on the left side is open in the upper

Wolfcamp sand. Moving over to the well in the center, which is the James Ranch 17 well, we are recently -- or Bass Enterprises is recently completing in this Wolfcamp interval or testing this Wolfcamp interval. They've shot those perfs as registered from 11,171 to 11,185, and that well is currently testing in this Wolfcamp zone.

Moving up to the third Bone Spring sand -- again the well on the left is the James Ranch 71 -- you can see that that well is completed into the third Bone Spring sand interval, along with the Wolfcamp.

Moving over to the James Ranch 17, that well is also a third Bone Spring producer, and you can see annotated below the log that that well was completed in January, 1995, into this third Bone Spring interval, and IP'd flowing 35 barrels a day and 120 barrels of water.

Moving over, the second well to the right is the James Ranch Number 7. It was the original third Bone Spring sand producer in the development area. That well was originally completed in the third Bone Spring in November of 1974. It produced a very short period of time and then was plugged off and gone down to capture Morrow reserves in August of 1975. And then after the Morrow played out, they came back and opened these perfs again in July of 1982. And that well has been producing from this third Bone Spring interval since July of 1982.

And then the furthest-to-the-right well is the James Ranch Unit Number 30. This well was completed in November of 1993, after just an acid treatment, flowing 14 barrels of oil and 13 MCF.

Later on, Bass Enterprises did go in and fracture-stimulate it, and our expert witness dealing with the reservoir engineering will talk about those rates from that well.

Then moving up to the Delaware section, what you can see is the second well from the left is the James Ranch Unit Number 19. This well was originally completed in April of 1993, in the Delaware "D" zone.

The Delaware "D" consists of approximately 300 feet. It consists of probably five major groups of sands, and these are all -- each of these five major groups consists of fine-grain laminated sands. We shot two of those intervals in that well, from 7418 to 7511, and that well IP'd flowing 213 barrels a day.

In October of 1993 we went up and added the Delaware "C" interval. And again, after stimulating it, we put that well on pump with the "D". So "C" and "D" together. And at that time the well was tested pumping 78 barrels of oil per day.

Then we went ahead and recompleted up into the Delaware "B", and again added that to the "C" and "D"

sands, and the well is currently pumping from all three zones open.

What you can also see from this cross-section is that these other wells that are just the Wolfcamp wells -- and there are many Morrow and Atoka producers out here, but that all these wells have similar pay criteria for cutoffs in terms of clean gamma ray and porosity greater than 10 percent in these Delaware sands.

And again, the Delaware sand, "D", is the main producing interval in the lower Brushy Canyon in the area, and we'll see that in following exhibits.

Q. All right, Mr. Insalaco, let's go back down to the upper Wolfcamp and look at the isopach map, Enron's Exhibit Number 6.

A. Exhibit Number 6 is a net sand isopach of the upper Wolfcamp sand, and again you can see here coded with the maroon square, that's the Number 71. That well is currently producing out of the Wolfcamp. And you can also see annotated the James Ranch Unit Number 17 well, which is currently testing the upper Wolfcamp.

You can also see that the sands trending north to south -- going from three feet, I think, is the thinnest well, in the James Ranch Unit Number 3, in Section 1, and it thickens as much as 66 feet in the James Ranch Unit Number 18, in the north half of Section 36.

And what this map would indicate is that most of the development area should be productive in the upper Wolfcamp sand.

Q. All right. Let's go to the third Bone Spring and look at the isopach for that interval. That's Enron Exhibit 7.

A. Yes, this is a net sand isopach, using the same criteria for cutoffs of net pay -- or net sand, excuse me, for the third Bone Spring sand.

I have also indicated the four wells that are currently producing out of the third Bone Spring.

Again, the isopach values, we have a well, the James Ranch Unit Number 10, has a zero registered, and going to a thickness of 56 feet in the James Ranch Unit Number 13, which starts at a surface location of Section 6 and bottomholes in Section 31.

Again, this isopach would imply that productive sands for the third Bone Spring exist throughout the development area.

Q. All right. Let's go to Exhibit 8 and look at the lower Brushy Canyon.

A. Exhibit Number 8 is a structure map on top of the lower Brushy Canyon, again, a marker that was identified on the cross-section at the top of the "D" intervals and at the base of the Delaware "C" interval.

Here you can see again that plunging anticline, structurally updip to the northwest, downdip to the south and southeast. You can also see annotated in red circles the Delaware producers, both "D" and/or "C" sand producers.

You can see that in the development area itself there are currently seven wells -- excuse me, six wells, that are lower Delaware producers. And you can see that there are a number of other penetrations annotated with the subsea datums that fall between that -- those six producers, and the producers off to the southeast. And the producers off to the southeast in Section 8, those five wells are operated by Santa Fe Energy and are part of the Sand Dunes-Delaware field.

So you can see again that the development area falls between these two established producing areas from the lower Delaware, in a good structural position.

Q. Let's go to Exhibit Number 9 and review the Delaware "D" sand.

A. This, again, I had mentioned previously that the "D" sand is the main producing interval in the area from the lower Delaware.

Again, all six of the producers in the development area are currently producing from the "D" sand, and also the eight wells down to the southeast that Santa Fe Energy operates are all producing out of the "D"

interval.

You can see isopach values as thin as the 16 feet registered in the James Ranch Unit Number 3, to a thickness of 127 feet in the development area in the James Ranch Unit Number 37, a Delaware producer.

Again, this isopach map shows a trend north to south, and it would indicate that productive Delaware exists throughout the development area.

Q. All right. Let's look at the last isopach on the "C" sand, Exhibit 10.

A. Yes, as again annotated on the cross-section, the Delaware "C" sand is the next zone up, approximately 200-foot thick, on the cross-section.

Here registered are two Delaware "C" sand producers, the James Ranch Unit Number 19, which again the "C" is open with other pay zones, the "D" and the "B" zone, and the Hudson Federal Number 1 in Section 1, which is also -- the "C" is also producing with the "D" interval in that well.

You can see again thickness variations from the James Ranch Unit Number 3 of 83 feet to a thickness of 180 feet in the James Ranch Unit Number 13.

This again is a north-to-south trending fine-grain sand, and this map would also indicate productive "C" throughout the entire development area.

Q. Mr. Insalaco, what geological conclusions can you reach about these zones in the development area from your geological study?

A. All right, that these zones, which are examples, again, of the main pays, and that there are other Delaware zones that come and go, that they are productive through the development area, that they exist behind pipe in deeper producers, the Atoka/Morrow producers in the James Ranch Unit, within the development area, and I believe that the undeveloped acreage is also productive.

Next, that we are going ahead in anticipation with an order to start some activity. We have the James Ranch Unit Number 16, which is identified on these exhibits in the north half of Section 36. This well, we're planning on spudding in December as a Delaware/Bone Spring/Upper Wolfcamp test.

Next, as I mentioned, on the cross-section when we were reviewing it, that Bass Enterprises is testing the James Ranch Unit Number 17 in the Wolfcamp sand and that they have plans to plug back and test the Delaware "C" and "D" intervals in that well.

They are also planning to test the Wolfcamp in the James Ranch Unit Number 30, and that Bass is contemplating proposing two wells in terms of Delaware/Bone Spring/Wolfcamp tests in the north half of Section 6.

And finally that in the prevention of waste, that if we had to have multiple wellbores per proration unit for each of these different pays, that that would be an efficient operational method and that when pushing the limits to the thinner areas, that if we have more than one pay objective identified, that we will probably be able to drill more wells.

Q. Mr. Insalaco, were exhibits 4 through 10 prepared by you?

A. Yes, they were.

MR. CARR: At this time Mr. Catanach, I would move the admission into evidence of Enron Exhibits 4 through 10.

EXAMINER CATANACH: Exhibits 4 through 10 will be admitted as evidence.

MR. CARR: And that concludes my direct examination of this witness.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Insalaco, how many wells within the development area are candidates right now at this point in time for commingling?

A. I believe that all the Bone Spring/Wolfcamp tests, which would be the Number 71, 17, 7 and 30, would have potential in the near future to have the Delaware

zones tested and commingled.

The deeper Morrow/Atoka producers have these zones behind pipe, but they would have to wait until those producing intervals fall off to a rate that's not economic, and then we would have the opportunity to come up in those wellbores.

I do believe that, again as I had mentioned, that we will be drilling the Number 16, and that again Bass is contemplating drilling two more wells -- or proposing, excuse me, two more wells -- and that these wells could also indicate the potential of possibly a dozen wells to be drilled out there.

I mean, again, the proration units for these pools are 40 acres.

Q. Okay. So at this point in time, there are only four wells that are existing that are candidates for commingling? Is that my understanding? Number 71, 17, 7 and 30?

A. In my opinion, yes. Those wells are currently Bone Spring and/or Wolfcamp producers, and they have Delaware zones that appear that would be productive behind pipe and that we could come up and perforate those, but that those Morrow wells -- as again, the James Ranch 7, 10, 13, 18, all these other Morrow penetrations have these same zones. They are currently gas producers, and so I would

think that that would -- that testing of these zones would be postponed until those wells are determined to be uneconomic.

Q. Which of the Morrow wells again?

A. James Ranch Unit Number -- I'm not sure about all of them. Just a minute -- Mr. Tower had an exhibit here where he had identified --

MR. CARR: That's Exhibit Number 2?

THE WITNESS: Yes, the James Ranch Unit Number 18, James Ranch Unit Number 4. And then the Atoka producers are the James Ranch Unit Number 13, James Ranch Unit Number 10, James Ranch Unit Number 1 and the James Ranch Unit Number 11.

Q. (By Examiner Catanach) So all of those wells may be candidates in the future for commingling?

A. Yes, sir.

Q. Okay. The existing Delaware wells -- are those only drilled to the Delaware formation?

A. Correct, sir, the James Ranch Unit 29 and 41 were operated by Bass, and they were just Delaware tests. The James Ranch Unit Number 19, 36 and 37 were Enron-operated wells, and they were only drilling to the Delaware.

The only other well, the Hudson Federal well in the northwest quarter of Section 1, that was formerly an Atoka producer, and that well has been plugged back and is

a Delaware "D" and "C" sand producer.

Q. That's the number what well?

A. Hudson Federal Number 1. It's in the northwest quarter of Section 1.

Q. Is that a candidate?

A. Well, it's already an example of a well that we did recomplete from a deeper formation to that. But in terms of the Wolfcamp and Bone Spring, you can see from the isopachs that in some of these intervals it's thinning over there, but this well also does have some mechanical problems with -- uphole, just below the Delaware.

Q. Okay. Now, it's not Enron's intent to deepen any of the existing Delaware wells at this point?

A. At this point in time, no, but that's something that we could consider. And I would think, again, going back to the deeper-pool wells, if it appears that these wells are producing at rates -- and analyzing their declines -- that it looks like they will be producing from the Atoka/Morrow zones for a number of years, that the potential exists that we would come in drilling a Wolfcamp/Bone Spring/Delaware test.

Q. Okay. The additional drilling which may occur, did you say it may be up to a dozen more wells, may be ultimately drilled and commingled in this fashion?

A. I believe so.

Q. And I believe it's your testimony, and the evidence shows that there, in fact, is potential in all three zones within the development area?

A. Yes, sir.

Q. In terms of reservoir quality, do you see big differences in the producing capabilities of some of these wells, depending on the sand thickness and that kind of thing?

A. Yes, I believe that there is some variation, but I think our next witness will be talking about decline rates and productive trends, comparing various wells that are currently producing. So you will get a feeling how pay thickness -- what influence pay thickness has on those wells' decline rates.

Q. Have you tested some of the thicker zones in these existing wells?

A. Yes. Again, starting at the -- this lowest pay, the upper Wolfcamp, that is a zone that had been identified out in this area, again, from the deeper penetrations, but that prior to the testing in the James Ranch 71, the productivity of it wasn't truly measured. I mean, we had identified the sand, it had recorded some drilling shows, but the testing of the 71, again, gave credence to that being a viable pay. That well on that isopach has only 20 feet, and you can see again a number of the other wells in

the development area with greater pay thicknesses.

So I think that the rates that we've got out of the 71 could be magnified in some of these areas where there's thicker sand development.

Again, then, moving up to the third Bone Spring sand, that pay had been established in the James Ranch 7 for a number of years. But in the last few years, we've recently pursued offsets with the 17, 30 and the 71 for that objective. And again, you can see that on the eastern portion of the development area, we have thicknesses corresponding to what's been identified in these wells. And so again, as are indicated with the James Ranch Unit 16 location, we feel very good that we'll have sufficient amounts of this sand to be a viable pay.

And then the same thing, again, as you move up to the Delaware zones. The Delaware and the Sand Dunes field down to the south has been an area that's been developed over the last four or five years. A number of wells have been drilled, and you're just seeing the edge of this development in Section 8, but that we -- As that development occurred, we evaluated the James Ranch area for the same potential.

And we drilled three -- excuse me, five Delaware wells between Bass Enterprises and Enron Oil and Gas for this lower Brushy Canyon pay, and then the recompletion of

the Number 1.

And you can also see, again, that through the development area, thicknesses corresponding are much thicker, identified in through Section 6 and 31, as they compare to the thicknesses of the sands producing in established wells.

I hope I answered your question.

And again, looking at an evaluation of the Sand Dunes areas, which is a field that's been established for three to five years, we have very comparable thicknesses of sand, net sand.

Q. Is it possible you're a part of that pool? Is it possible that that Sand Dunes field is continuous up to the northwest here?

A. That might be possible. I believe that -- and I'm not an expert witness on this, but I believe that potash area in the western half of Section 8 has restricted the development of that, up towards the James Ranch unit.

EXAMINER CATANACH: Okay, I have nothing further of this witness, Mr. Carr.

Are there any questions of this witness, any additional questions?

If not, he may be excused.

THE WITNESS: Thank you.

MR. CARR: At this time, Mr. Catanach, we would

call Mr. Randy Cate.

RANDALL S. CATE,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Could you state your name for the record, please?

A. My name is Randall Cate, C-a-t-e.

Q. And where do you reside?

A. I live in Midland, Texas.

Q. By whom are you employed?

A. I'm employed by Enron Oil and Gas.

Q. Mr. Cate, what is your position with Enron?

A. I'm a reservoir engineer.

Q. Have you previously testified before this Division?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as a petroleum engineer accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Enron?

A. Yes, I am.

Q. Does the geographic area of your responsibility

with your company include the portion of southeastern New Mexico involved in this case?

A. Yes, it does.

Q. Have you made an engineering study of the area?

A. Yes, I have.

Q. And are you prepared to present the results of that effort?

A. Yes.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Mr. Cate, let's first go to what has been marked as Enron Exhibit Number 11, and I would ask you to just identify that.

A. All right, it's a summary that I did, addressing the producing characteristics of each formation, their treatments, some perforated intervals, again, some average producing rates that were derived, again, for each of the three intervals that we're asking to downhole commingle under this Application.

And the second page would then address the reservoir protection issues as outlined by the Commission, under their commingling rules. And then on the bottom of the second page and into the third page, I discuss the allocation procedure that we would recommend and adhere to

under the approved authority to commingle in this area.

Q. Exhibit 11, in fact, is a summary of the information that you will be presenting with each of the following exhibits; is that not correct?

A. Yes.

Q. All right. Let's go to the producing characteristics of each of the formations, and referring to Exhibit Number 12, could you summarize the characteristics of the Delaware formation?

A. Yes, as Mr. Insalaco had mentioned, there are six current Delaware producers in the development area. What I've done is normalized their production, oil production versus time. And what I mean by "normalized" is that if a well was in the Delaware, it might flow for the first month and drop off and then need to be put on pump. When they're put on pump, the highest rate then occurs.

What I've done is bring the highest rate to month number one, and that's when we're really starting our decline. So there may be one month or one and a half months of lower production data ahead of this, or perhaps it only produced for one week or two weeks out of that month. So that's what I mean by normalized.

And what you can then do is lay them all on the same time scale and see the comparison and see if they are tracking. And in the Delaware, on Exhibit 12, it's -- all

but one of the wells, after this two months of normalized production and certainly into the later months, shows that they're all performing very similarly.

Q. They basically are pulling into line, do they not?

A. Yes, they're all --

Q. How does this seem to relate to the thickness of the interval or the geological interpretation and the variations therein?

A. The Hudson well is the one in brown. It is the highest producer on the normalized scale here. But even after several months, it begins to come down in line with those.

I think that probably the lower permeability of the sands will tend to override the thicknesses. The thicknesses will certainly increase the ultimate recoveries, but as far as producing characteristics, I think we're seeing just the low permeabilities as the primary driving force here.

Q. What sort of initial bottomhole pressures are you seeing in the Delaware?

A. The initial bottomhole pressures in the Delaware are 3200 to 3400 p.s.i., absolute. And we don't have any actual measurements in this area, but I did pull some buildups from some Delaware wells south of here in the

Poker Lake field, basically the same subsea datum, and that's what those showed. And you can tend to get a good feel for it as you drill fluid and get kicks through it. So I've looked at several of them, and that's what the pressures --

Q. And when you complete in this interval, what sort of treatments are typically being used?

A. A typical treatment -- Due to the low permeabilities, again, you do an acid ball out to open all perforations, and then in general they need a hydraulic fracture treatment, an average of about 30,000 gallons of carrying fluid, plus 80,000 pounds of sand.

And the other operator, Bass, tends to put more sand in one of their typical jobs, maybe 40,000 gallons of the carrying fluid and 200,000 pounds of sand. And that is listed on page 1 of Exhibit Number 11.

Q. Anything else on the Delaware?

A. No, just, again, as far as allocation concerns, you can see that I think we've got very close agreement, especially as the time goes on, in which to be certain that we're allocating the commingled wells properly.

Q. Let's go to the next exhibit, Exhibit 13, and I would ask you to review the producing characteristics of the Bone Spring.

A. Okay. Again, it's a normalized oil-production-

versus-time plot for the four current Bone Spring producers.

I'll make a note on the James Ranch Unit Number 71, that the -- and that well is the approved -- currently approved well commingled in the Wolfcamp and the Bone Spring. What is plotted here is its allocated production, based on the approved formula. And it lays -- I think it is an interesting point and a good point that it lays right in line, again, especially after two to three months, they just come right together with the other production we've got.

The James Ranch Number 7, as Mr. Insalaco had previously mentioned, that well was the first Bone Spring well, and we've got the most history on it. And then the James Ranch 17, he also did mention, is currently under a workover that is just -- We've just gone back down into the Wolfcamp and completing it in anticipation of this order.

And again, the James Ranch Number 30. The main issue, again, or what this really shows, is the very close agreement of these zones after two to three months of production.

Q. Bottomhole pressure ranges for the Bone Spring are what?

A. Yes, we have got some actual static measurements upon completion, and that's what's listed on page 1 of my

summary. And they are also presented as an exhibit, two exhibit pages in this packet.

The initial bottomhole pressure was 6947 pounds at 10,909 feet in the James Ranch Unit 71, and 5737 pounds at 10,932 in the James Ranch Unit Number 30. These are what are measured after -- I believe it was approximately three days or so in the James Ranch Unit Number 30, and four to five days in the James Ranch Unit Number 71, after those types of shut-ins.

Q. All right. Let's move to Exhibit Number 14, and I would ask you to review the characteristics of the Wolfcamp.

A. Okay. I would like to say on the Bone Spring that it also does require a hydraulic fracture treatment due to very low permeabilities. And again, that is listed -- an average job would be 80,000 gallons and 325,000 pounds of sand.

Q. All right. Let's now go to the Wolfcamp.

A. Okay. The Wolfcamp, we've only got the one well in it so far that has a history, and then the Number 17 is currently being tested, and it has IP'd over 200 barrels per day flowing. And then there's some current work still being done. But that is very similar to the testing that we had in the Number 71.

Again, the first month of production, though,

does not average anywhere near the IP. They do fall off very quickly. And as you can see on the Exhibit Number 14, the first month averaged 67 barrels per day in the James Ranch Number 71. And then it does fall off very quickly, and I would expect this same type of production, give or take a few barrels, out of the Wolfcamp in these other wells.

Q. Treatment on this zone?

A. Treatment on this zone is -- Again, hydraulic fracture is required due to low permeabilities. 24,000 gallons and 155,000 pounds is what we've been doing.

One operational consideration here which we did bring up when we got the authority on the James Ranch 71 was, it helps the operation to be able to frac the Bone Spring and the Wolfcamp either together as one operation or separately but in the same operation, instead of several months apart or several years apart, for -- Because when you do draw one zone down -- and these sands are approximately 100 feet from each other -- if you do draw one down lower than the other one, then you can take the frac right in, if you try to bring a new frac above it, it could go right into the lower-pressured zone.

So there's an operational concern, and that could result in reduced recoveries because of an ineffective fracture treatment. So I did want to make that comment as

far as a need to be able to complete the Bone Spring and Wolfcamp initially in these wells.

Q. Do you anticipate any crossflow between these pools?

A. No, I don't.

Page 2 of the summary, up at the top, I discuss that. There could be some wells out here, and it is right now, the 17 and the 71 will soon be, but -- in which the Bone Spring and Wolfcamp is commingled. Our pressure measurements are showing basically just a gradient difference to depth of 122 p.s.i., and subsequent flowing bottomhole pressure data shows only 100 pounds' difference. And again, that's primarily just due to the depth difference in the James Ranch Unit 71.

After a few months of production, we did do -- on the first page, I meant to mention that, after six months we did run a buildup on the Wolfcamp in the James Ranch Unit 71, and its built up pressure after 98 hours was only 3725 pounds, almost a 50-percent drawdown in a short period of time. Again, that's due to the very low permeabilities that we're dealing with. And then it takes a very long time for these zones to build back up.

In a well where either one of those or both those zones would be commingled with the Delaware, we will artificially lift the well, and all three zones would be

artificially lifted, and we anticipate a bottomhole producing pressure of 500 to 800 pounds, depending on the type of artificial lift. And that would prevent any opportunity of crossflow from the deeper zones, say, into the shallower zone.

I did look at the rule the Commission has on the 50 percent -- I guess it's a 50-percent rule. The Delaware pressures, if you correct the Bone Spring and Wolfcamp pressures up to the Delaware datum of 7500 feet, the Delaware pressures are more than 50 percent of those adjusted Bone Spring and Delaware pressures as we have measured, so that meets the Commission's requirement there.

Furthermore, if the operator, either Bass or Enron, would agree to immediately notify the supervisor of the Artesia District Office, in the event that any of the commingled wells have been shut in seven consecutive days, and present a plan for remedial action.

Q. Mr. Cate, what is Exhibit Number 15?

A. Exhibit Number 15 are the pages of the measured pressures, bottomhole pressures, in the James Ranch 71 and the James Ranch Unit Number 30 that show at a corrected datum what -- a corrected datum of 7500 feet, which is the Delaware datum -- what the anticipated pressures could be. And then that is what is compared to the 50-percent rule.

Q. Do you anticipate any problems with the

compatibilities of the commingled fluids?

A. No, we don't. We have given Martin Water Lab the produced waters, and they have given us a report that states they see no incompatibilities at whatever different proportions of mixtures might be.

Q. And is their report what is marked Exhibit 16?

A. Yes, it is.

Q. What are the gravities of the oils that will be commingled?

A. The oil gravities are in the 41 to 43.1 range, with the Delaware being the lower, and the Wolfcamp/Bone Spring the upper.

Bass has shown me -- They have measured some gravities slightly higher than the 43, but I took our numbers from our wells that -- in which we're selling out of the tanks, and that is the basis on which you are paid, and that's the comparison I'm making.

Q. Should commingling affect the value of the commingled production?

A. No, it will not. These are so similar that there won't be any difference in price received if the streams are commingled.

Q. What is the potential for secondary recovery operations in this area?

A. In the Bone Spring and the Wolfcamp, we see very

little, just due to the depth and the low permeabilities, possibly some technology in the future, gas injection or something. But right now we just can't see it.

Now, the Delaware is a possible waterflood candidate. We don't anticipate it for any time in the near future. And if the Delaware or a portion of it were to need to be flooded in those wells, we could easily isolate the zones for a flood, or redrill the Delaware in that case.

Q. How does Enron recommend that the production be allocated between the commingled zones?

A. We would recommend a procedure as follows: We would initially complete the Bone Spring and Wolfcamp formations, monitor the production for 30 to 90 days or until stabilized, and as the normalized oil-production first-time plots show, we think we have very good agreement and can predict very well what the production should be.

We can run a production log, which we have found to be accurate in the past and/or isolate, mechanically isolate, the zones when it is time to bring the Delaware production on and get an actual flowing test there, which would just require a temporary plug being set over the Bone Spring until the Delaware is completed and it is tested for 30 or 90 days, in which we will get actual production data on which to base our allocation, once all three or two

zones are commingled.

The allocation would be consistent with actual tests and then closely compared to the expected rates, based on the offset production histories of the wells that we have in the development area.

Q. Enron's requesting a special allowable within the development area. Could you explain that request to Mr. Catanach?

A. Yes, that would be on page 3 of this summary here, Exhibit 11, and we requested the daily allowable for commingling to be set as the top allowable of the shallowest zone commingled. Partly, that's -- that gives it a single allowable across the field, and it's easy to calculate, obviously.

And therefore, if the Bone Spring is the shallowest of the commingled zones, it would be 320 barrels of oil per day, based on the standard depth bracket allowable under Rule 505.

If the Delaware sand is the shallowest formation commingled, then we would ask for 187 barrels per day.

The first month's average production on these wells is 286 barrels of oil per day, but because we do not anticipate full commingling of all three or two sands until probably two to three months, then I don't believe we're going to need an allowable higher than the 187, in the

event the Delaware is included.

The third month average production of all three zones is 124 barrels per day. Again, that's average, and there could be some wells a little higher and some wells a little lower.

Also, we think the standard gas limit rules, 2000 to 1 GOR, apply here. And under the commingling rules, the Commission has in place a water production limit of 80 barrels per day, per commingled zone is also appropriate.

Q. Now, Mr. Cate, in this case Enron is seeking authority to -- blanket authority to downhole commingle in this area and a special allowable; is that right?

A. That's correct.

Q. And then you'll go forward and be developing the area on a well-by-well basis?

A. Yes, we would.

Q. And all other requirements of the state or federal government will have to be met at the time those wells are drilled on a well-by-well basis; is that correct?

A. That is correct.

Q. Can you summarize for the Examiner the results that you anticipate will accrue if, in fact, this Application is approved?

A. Yes. As Mr. Insalaco has stated, additional drilling, we believe, would occur, especially when we get

to the edges of the sands, with two or three potential targets, rather than just one, and knowing that the zones can be commingled. That will result in more drilling. We've already started additional workover activity in anticipation of the authority.

Waste would be prevented, because we will not have to drill additional or extra wells for the Delaware sands. And we are more likely, then, to take every well down to the Wolfcamp, even if it's primarily a Delaware target. So we will most likely produce reserves that would not otherwise be produced without the order. And we are just -- That would just allow us to more efficiently and economically develop this area.

Q. If the allocation procedures that you're recommending are adopted, in your opinion, will correlative rights be protected?

A. Yes, they will.

Q. Were Exhibits 11 through 16 either prepared by you or compiled at your direction?

A. Yes, they were.

MR. CARR: At this time, Mr. Catanach, we would move the admission into evidence of Enron Exhibits 11 through 16.

EXAMINER CATANACH: Exhibits 11 through 16 will be admitted as evidence.

MR. CARR: And that concludes my direct examination of Mr. Cate.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Cate, the rates that you expect to encounter in the Wolfcamp and Bone Spring intervals, are they not sufficient to justify drilling stand-alone wells?

A. They -- Probably alone, we would rank these very low on where we would want to spend our money. We would probably be coming in on every well that we drill and asking for commingling authority right up front on the Wolfcamp and Bone Spring. I mean, I'm sure we would. And we've already done that on the James Ranch Unit 71.

So I would not say that we would not drill the wells without the Delaware, but we would certainly not go beyond where we know we can get both zones together and have a reasonable chance of getting those without knowing that we can get the Delaware included also.

The Wolfcamp, I think you can see at 20 barrels a day, that by itself would probably not meet guidelines for us to drill wells, just for the Wolfcamp.

Q. Have you looked at a dual-completion-type setup in the Wolfcamp and in the Bone Spring?

A. We've considered that. Because the wells have to be frac'd, you take a risk at this depth of planting your

packer or whatever tool assembly would be required to separate or isolate the zones, and if sand comes in then we're talking a lot of money. And we've had one or two experiences out there where something like that has occurred, and we would prefer not to.

Q. Is it economically viable to dually complete those two zones, aside from operational problems?

A. It probably is. It's -- Again, it probably is economic, but it is just laden with operational risks that could potentially cause you to lose either one of the zones if in fact tools got stuck down there and could not be fished.

Q. Now, the producing rates in the Delaware may be sufficient to justify just drilling Delaware wells, are they not?

A. Yes, and we've drilled several Delaware stand-alone wells. Again, it cost a lot of extra money, approximately $600,000 per Delaware well, and I believe that that is or would fall under a waste provision, if we don't -- if there's any way not to have to drill two wells to basically recover the same reserves that one well could.

Q. Having to drill two wells is not going to decrease any kind of ultimate oil recovery?

A. No, I don't believe it would ultimately decrease.

Q. Do you feel like commingling might increase

recovery, say due to reduced operating costs?

A. Yes, there would definitely be a reduced operating cost, and any one of the zones would have a lot lower production rate necessary to keep producing the wells, so that that's exactly right.

The economic life of the wells will definitely be prolonged due to the commingling, and additional reserves would definitely be recovered.

Q. You see no problem in crossflow of any kind between the commingling Delaware and any of the other zones?

A. No, I don't. I think -- And that's part of the reason we don't mind taking some time and producing the Wolfcamp and Bone Spring on down. And the pressure data we've collected indicates that -- because it's so low perm, it -- near a wellbore, it is going to fall down to levels that I just don't believe would be conducive to crossflow at all.

And again, we will install artificial lift and keep the bottomhole pressures well below the shut-in pressures of these wells, or of the zones.

Q. So that that artificial lift will be installed before commingling takes place in any of the zones?

A. That's correct, yes. Or at the same time that commingling takes place.

Q. Now, in each of the existing wells and the future wells to be drilled, is it your intent to in fact commingle all three zones, or are you going to pick and choose?

A. I think at this point, based on Mr. Insalaco's geology within this development area, we would anticipate all three zones to be commingled. And of course, it's hard to predict without actual well logs, but that is our intent and that is what we're asking for.

If I might expand on that a little bit, if we were to encounter a zone that is substantially different than what we have seen so far, a Cherry Canyon zone that is prolific and capable of top allowable all by itself, in that case, I could see that we would not -- It would, then, be worthy of its own development program, and I would say in that case, we would probably not need or feel the need to commingle in that case.

Q. Did you give a three-month average production rate?

A. Yes, it's on the first page. For --

Q. Okay, for --

A. -- for each zone. And if you add those three-month averages up, it comes to 124 barrels of oil per day.

Q. What do you anticipate being the procedure after -- if we give you blanket approval? Do you anticipate having to submit additional data or paperwork

for this?

A. Yes, I think so. I think our intent would be to provide an allocation based on our test data, either -- as the Commission dictates, either to the Artesia District Supervisor or the Division, whichever one you choose, and we would provide that and be willing to provide any backup test data to support that allocation if the Commission desires.

And we would anticipate doing that on every well that we commingle.

Q. Okay. As far as -- You don't anticipate having to submit pressure data or anything else required by 303?

A. When we -- I don't -- We don't intend to collect data on every well for that purpose, to supply. But in our normal operations we do collect pressure data, and in those cases that we do we would definitely make it available, if the Commission wanted it.

Q. You feel like the data you've presented here is going to be very representative of the data obtained within the whole development area?

A. Yes, we've studied the -- all three formations. And I believe we've collected enough data at this point that that -- this does represent what we should expect on further wells drilled and the workovers into the behind-pipe.

Q. Do you have a preference -- On the Bone Spring/Wolfcamp testing, do you have a preference of running either the production log or mechanically isolating the intervals?

A. No, I believe both are accurate. I think that when we do prepare to temporarily plug the Bone Spring/Wolfcamp to complete the Delaware, that at that point it would be a good time to do an isolation test of the Bone Spring/Wolfcamp and -- for a short-term, possibly a week, and then go on up the hole.

But we have found the production logs to be an accurate measurement tool, and so we would like to be able to run one or the other. But we will do one or the other in order to verify the allocation.

Q. You're asking for an 80-barrels-per-day limit on the water per zone; isn't that right?

A. Yes. Based on what we've seen on the water production, that will be sufficient for -- to cover any water produced.

The Delaware generally will potential with -- The highest water out of the three zones comes from the Delaware. And as you can see, it can be in the hundred barrels per day on an average, on initial potential. But it drops to about 80 barrels per day within just a few months, and it will decline on down with the oil

production. So I do feel that would be sufficient for us.

Q. Is that high water production -- would that in any way detrimentally affect the Bone Spring or Wolfcamp?

A. No. Again, with the wells on pump, on artificial lift, we'll definitely be moving the water.

And number two, the compatibility test, as done by Martin Water Lab, shows -- they saw no tendency to precipitate any harmful solubles or whatever -- scale.

EXAMINER CATANACH: I think that's all I have, Mr. Carr.

Do you have anything further?

MR. CARR: Nothing further, Mr. Catanach.

EXAMINER CATANACH: This witness may be excused.

Is there anything further by any of the parties in this case?

MR. CARR: I think there's statements, Mr. Catanach.

EXAMINER CATANACH: Okay. We'll accept statements at this time.

MR. BLEDSOE: I'm David Bledsoe with Bass. We are the operator of the James Ranch Unit, and we are in full support of the commingling order to commingle all three of these zones.

EXAMINER CATANACH: Okay, thank you.

Any additional statements?

MR. PATCHET: I'm Stanley Patchet, Westinghouse Electric Corporation. We're the manager and operating contractor for the Waste Isolation Pilot Plant. We have no comments or questions, but we would like to continue to be considered an interested party.

EXAMINER CATANACH: Okay. Anything else?

Okay, there being nothing further in this case, this case, Number 11,424, will be taken under advisement.

(Thereupon, these proceedings were concluded at 11:52 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11424 heard by me on November 16 1995.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL November 22nd, 1995.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998